

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	NH-019-2(55)	2004	3	112

GENERAL NOTES

- This project includes cold-planing; leveling; reconstructing and resurfacing the roadway; widening shoulders; flattening shoulder slopes; resetting, replacing or installing guardrails; adjusting and/or reconstructing centerline survey monuments; adjusting utility valve boxes and manholes; replacing signs and reflector markers; reinstalling pavement markings; replacing drainage grates; upgrading ramps; reconstructing bridge rails and endposts; replacing expansion joints; and cutting off headwalls.
- The Contractor is reminded of the requirements of Subsection 108.01 – Subletting of Contract, which requires him to perform work amounting to not less than 30 percent of the total contract cost less deductible items. Non-compliance with this Subsection may be grounds for rejection of bid.
- The Contractor's attention is directed to the following Sections of the Special Provisions: Subsection 107.13 – Public Convenience and Safety, Subsection 107.21 – Contractor's Responsibility for Utility Property and Services, and Section 645 – Traffic Control.
- The Contractor shall notify the State in writing, two (2) weeks prior to starting paving operations.
- At the end of each day's work, the Contractor shall remove all equipment and other obstructions to permit free and safe passage of public traffic.
- The existence and location of underground utilities, manholes, monuments and structures as shown on the plans are from the latest available data but the accuracy is not guaranteed. The encountering of other obstacles during the course of the work is possible. The Contractor shall be held liable for any damages incurred to the existing facilities and/or improvements as a result of his operations.
- The exact locations and limits or areas to be reconstructed and cold planed shall be determined in the field by the Engineer.
- Preformed Pavement Marking Tape shall be removed prior to resurfacing. Removal shall be by scraping, grinding or other method approved by the Engineer. Payment shall be incidental to Item No. 401.0400 – Asphalt Concrete Pavement, Mix No. IV.
- The Contractor shall remove and dispose of all existing raised pavement markers prior to the overlaying of Asphalt Concrete. This work shall be considered incidental to Item No. 401.0400 – Asphalt Concrete Pavement, Mix No. IV.
- Smooth riding connections shall be constructed at all limits of resurfacing including the beginning and end of project, side streets and driveways as shown on the plans and/or as directed by the Engineer.
- Existing drainage system will be functional at all times during construction Contractor is to furnish materials, equipment, labor, tools and incidentals necessary to maintain flow. This work shall be considered incidental to the various contract items.
- Contractor shall provide for access to and from existing side streets and driveways at all times.
- All saw cutting work shall be considered incidental to various contract items and will not be paid for separately.
- Initial preparation of shoulder areas shall be done by the Contractor. Shoulder preparation shall consist of clearing, grubbing, grading, reshaping and compacting the unpaved shoulders with suitable excavated material from roadway reconstruction as shown on the plans and/or as directed by the Engineer. Contractor shall also be responsible for finish rolling and maintaining the shoulders until project completion. This work shall be considered incidental to Item No. 401.0502 – Asphalt Concrete Pavement, Mix No. V.
- Unprotected pavement dropoffs greater than 2" shall not be allowed during non-working hours, except where approved by the Engineer in writing.

- Public Notice is required for lane closures. Contractor shall submit notice to the Engineer for approval a minimum of three weeks prior to publication. Pre-approval of notice, with dates left blank, is permissible.
- Contractor shall mark the backs of all signs using labels and equipment provided by the State. Payment to be incidental to various Contract Items.
- Cold-planing of 100-ft. transitions at project limits shall be considered incidental to Item No. 401.0400 – Asphalt Concrete Pavement, Mix No. IV.
- Contractor shall maintain at least one paved shoulder free and clear of debris for pedestrian and bicycle traffic at the end of each work day.
- The Contractor's attention is called to Section 407 – Tack Coat of the Special Provisions.
- Temporary striping on cold planed surfaces shall be with paint (tape will not be allowed). Temporary striping on final overlay shall be with temporary tape.
- All work specified in the contract, but not listed separately in the proposal schedule shall be considered incidental to other various contract items, and shall not be paid for separately.
- Bridging material over excavations and trenches shall be non-skid. Drawings of the bridging (including shoring) shall be stamped by a licensed structural engineer. Drawings and calculations shall be submitted to the Engineer for approval prior to use.

COUNTY DEPARTMENT OF WATER SUPPLY NOTES

- All Work shall conform to the Department of Water Supply's (DWS) "Water System Standards", dated 2002, as amended.
- Contractor's attention is called to DWS Standard Details V1, V14 and V20 which require concrete slabs for valve frames and boxes.
- All existing waterlines, waterline appurtenances, and other utilities shown on the plans reflect the most recent information made available to this Department. The Contractor shall be responsible for verification of the exact locations of all existing utilities in the field whether shown on the plans or not. The Contractor shall bear all cost for damages done unto the affected utilities.
- Contractor to call DWS 72 hours prior to starting work for adjusting water valve box/ manhole frame and cover, and one (1) week prior to any connection, chlorination, shutoff, or relocation work.
- All work, equipment, and material furnished by the DWS shall be paid for by the Contractor.
- All connections to existing waterlines shall be done by the DWS. The Contractor shall provide all excavation, backfill, road repair, traffic control, etc.
- All fittings (Class 250) and all gate valves (Class 200) shall be ductile iron with mechanical joints, unless otherwise specified.
- All waterlines 4" and larger in diameter shall be ductile iron with push on joints (Class 52), and all waterlines smaller than 4" in diameter shall be soft copper (Type K), unless otherwise specified.
- The waterline shall be tested at a minimum of 225 psi or one and a half times static pressure at the low point under DWS supervision just prior to paving the roadways.
- The Contractor shall be responsible for the chlorination of the water system and shall bear all costs. The person engaged to do the chlorination work must have the appropriate license to perform the work in Hawaii.
- When compaction test(s) are required for the project, the Contractor shall be responsible for providing DWS with proctor results of materials to be used for the portion of work requiring compaction. These results shall be certified, and shall be furnished to DWS one week prior to commencement of work.

- Where water shutoff of more than three hours becomes necessary, the Contractor, at his own expense, shall provide a temporary bypass line of the size determined by the DWS engineer. The DWS also reserves the right to require bypass lines, regardless of the water shutoff period, if it is deemed necessary.

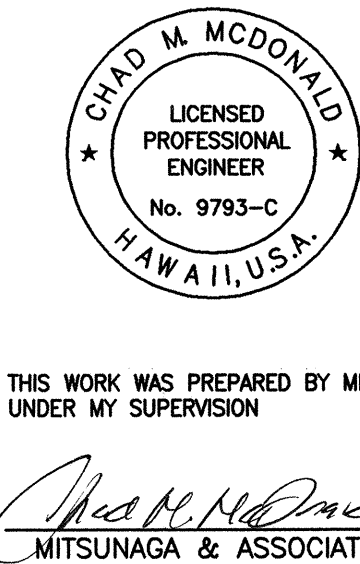
GENERAL NOTES FOR TRAFFIC CONTROL PLAN

- The Contractor shall make minor adjustments at intersections, side roads, drainage structures, etc., to fit field conditions.
- Cones or delineators shall be extended to a point where they are visible to approaching traffic.
- Traffic control devices shall be installed such that the sign or device farthest from the work area shall be placed first. The others shall then be placed progressively toward the work area.
- Regulatory and warning signs within the construction zone that are in conflict with the traffic control plans shall be removed or covered. All signs shall be replaced upon completion of the work.
- All regulatory, guide, and construction signs and barricades shall have a high-intensity reflective background.
- Flaggers and/or police officers shall be in sight of each other or in direct communication at all times.
- The Contractor shall install a flashing arrow signal as shown on the traffic control plans, unless otherwise authorized by the Engineer.
- Sign spacing (L), taper lengths (T) and spacings of cones or delineators shall be as noted on the traffic control plans, or special provisions.
- All traffic lanes shall be a minimum of 10 feet wide or as noted on the plans.
- All construction warning signs shall be on square tube post and be promptly removed or covered whenever the message is not applicable or not in use.
- The back of all signs used for traffic control shall be marked with the sign owner's name.
- At the end of each day's work or as soon as the work is completed. The permittee shall remove all traffic control devices no longer needed to permit free and safe passage of public traffic. Removal shall be in the reverse order of installation.
- Replace permanent pavement markings and traffic signs upon completion of each phase of work.
- All work zone traffic control devices shall comply with the "Statewide Guidance For Work Zone Traffic Control Devices" Dated September 13, 2003 and the Manual on Uniform Traffic Control Devices (MUTCD) as referenced in the 23 Code of Federal Regulations (CFR), Part 655, Subpart F. The MUTCD shall be recognized as the national standard for traffic control devices on all public roads open to public travel in accordance with 23 U.S.C. 109(d) and 402(a).

LEGEND	
----	Right-of-Way
°PP	Power Pole
°WMH	Water Manhole
°WV	Water Valve Box
□GDI	Grated Drop Inlet
⊥	Traffic Sign With 1 Post
⊥⊥	Traffic Sign With 2 Posts
□PB	Elec. Pullbox
- - - -	Single Metal Guardrail
●	Adjust Valve Box/ Manhole
⊙	Construction Survey Monument

- Cones or delineators shall be installed at 25' o.c. max. along tapers.
- Cones or delineators shall be installed at 25' o.c. max. along tangents.
- Posted speed limit along Hawaii Belt Rd. (State) is 55 M.P.H. Speed limit shall be reduced to advisory 25 M.P.H. through all construction work zone diversions.
- Conflicting striping shall be eradicated (pavement) or covered (concrete bridge deck).
- One lane closed (at bridge) plan shall be used on only one bridge at any given time.

ORIGINAL PLAN	SURVEY PLOTTED BY	DATE
NOTE BOOK	DRAWN BY	6/04
No.	DESIGNED BY	6/04
	QUANTITIES BY	6/04
	CHECKED BY	6/04



STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION
**GENERAL NOTES
AND LEGEND**
HAWAII BELT ROAD RESURFACING
East Paaulo Bridge to Kaala Bridge
Federal Aid-Project No. NH-019-2(55)
Scale: As Noted Date: April 2004
SHEET No. C-1 OF 49 SHEETS